Guidelines for Hot Work Operations

2022



When the city is under Burn Restrictions or a Burn Ban, a permit is required <u>prior to</u> commencing any outdoor hot work or other activities which generate a flame or ignition source. Permits are obtained, free of charge, by visiting the Division of the Fire Marshal (DFM) at the Fire Department Complex located at 375 Printers Parkway, Colorado Springs, CO 80910.

Hot work activities include, but are not limited to:

- Welding and associated processes
- Brazing
- Cutting
- Soldering
- Heat treating
- Grinding
- Thawing of pipe
- Powder-driven fasteners
- Hot riveting
- Torch applied roofing
- Thermite welding
- Other similar operations producing or using a spark, flame or heat
- Includes gas and electric methods



Obtaining a Permit

- 1. Print the "Hazardous Activity Permit Application." This is found under the "Permit Application" link on page: https://coloradosprings.gov/fire-department/page/hazardous-materials-permit
- 2. Complete sections 1, 2, 3, 4 and 8
- 3. On second page of application, Select Box "105.6.23-Hot Work Operations" under "PRESCRIBED (REVOCABLE) PERMITS"
- 4. Submit completed application and locations to the Division of the Fire Marshal, in person at the address in the first paragraph.

It's important to note that once a permit is received, the Division of the Fire Marshal must be notified of each and every location where hot work is being performed.

- 5. If multiple hot work locations are known, provide a separate sheet listing the locations and the timeframe they entail (i.e. this week hot work will be performed at the following locations...). This may be faxed to 719-385-7334.
 - a. For emergency type locations, provide the location and date utilizing the second page of this document and fax ASAP to 719-385-7334
 - b. Call the office the following business day to confirm receipt of fax

The Colorado Springs Fire Department allows Hot Work Operations in accordance with the International Fire Code (IFC) and amendments as adopted.

- 1. Obtain permit from CSFD
- 2. Utilize "Hot Work General and Fire Safety Requirements" checklist for each hot work area
- 3. The permit and "Hot Work General and Fire Safety Requirement" checklist shall be available on site during hot work activities
- 4. The permit also requires that the qualified operator understands the provisions of these guidelines as well as agrees to follow all applicable requirements of the International Fire Code as adopted.

If there are any questions, please contact the Division of the Fire Marshal at (719) 385-5978.

Business Name		Permit #
Address and Specific Location of Hot Work	Date(s) of Hot Work	

HOT WORK GENERAL AND FIRE SAFETY REQURIEMENTS

GENERAL REQUIREMENTS	COMPLETED/ CHECKED	COMPLETED/ CHECKED BY:
3503.3 Hot work program permit. Hot work permits, issued by an approved responsible person under a hot work program, shall be available for review by the fire code official at the time the work is conducted and for 48 hours after work is complete.		
3503.4 Qualifications of operators. A permit for hot work operations shall not be issued unless the individuals in charge of performing such operations are capable of performing such operations safely. Demonstration of a working knowledge of the provisions of this chapter shall constitute acceptable evidence of compliance with this requirement.		
3503.5 Records. The individual responsible for the hot work area shall maintain "prework check" reports in accordance with Section 3504.3.1. Such reports shall be maintained on the premises for not less than 48 hours after work is complete.		
3503.6 Signage. Visible hazard identification signs shall be provided where required by Chapter 50. Where the hot work area is accessible to persons other than the operator of the hot work equipment, conspicuous signs shall be posted to warn others before they enter the hot work area. Such signs shall display the following warning (Centered across three lines): CAUTION> <hot in="" progress="" work=""> <stay clear=""> FIRE SAFETY REQUIREMENTS</stay></hot>		
3504.1.1 Combustibles. Hot work areas shall not contain combustibles or shall be provided with appropriate shielding to prevent sparks, slag or heat from igniting exposed combustibles.		
3504.1.2 Openings. Openings or cracks in walls, floors, ducts or shafts within the hot work area shall be tightly covered to prevent the passage of sparks to adjacent combustible areas, or shielded by metal fire-resistant guards, or curtains shall be provided to prevent passage of sparks or slag.		
3504.1.3 Housekeeping. Floors shall be kept clean within the hot work area.		
3504.1.4 Conveyor systems. Conveyor systems that are capable of carrying sparks to distant combustibles shall be shielded/shut down.		
3504.1.5 Partitions. Partitions segregating hot work areas from other areas of the building shall be noncombustible.		
3504.1.7 Precautions in hot work. Hot work shall not be performed on containers or equipment that contain or have contained flammable liquids, gases or solids until the containers and equipment have been thoroughly cleaned, inerted or purged; except that "hot tapping" shall be allowed on tanks and pipe lines where such work is to be conducted by approved personnel. Hot work on flammable and combustible liquid storage tanks shall be conducted in accordance with Section 3510 of the IFC.		
3504.1.8 Sprinkler protection. Automatic sprinkler protection shall not be shut off while hot work is performed. Where hot work is performed close to automatic sprinklers, noncombustible barriers or damp cloth guards shall shield the individual sprinkler heads and shall be removed when the work is completed. If the work extends over several days, the shields shall be removed at the end of each workday. The fire code official shall approve hot work where sprinkler protection is impaired.		
3504.1.9 Fire detection systems. Approved special precautions shall be taken to avoid accidental operation of automatic fire detection systems.		
FIRE WATCH REQUIREMENTS		
3504.2.1 When required. A fire watch shall be provided during hot work activities and shall continue for not less than 30 minutes after the conclusion of the work. The fire code official, or the responsible manager under a hot work program, is authorized to extend the fire watch based on the hazards or work being performed.		
3504.2.2 Location. The fire watch shall include the entire hot work area. Hot work conducted in areas with vertical or horizontal fire exposures that are not observable by a single individual shall have additional personnel assigned to fire watches to ensure that exposed areas are monitored. Hot work areas include 35 ft radius and 15 feet above and below the hot work.		
3504.2.3 Duties. Individuals designated to fire watch duty shall have fire-extinguishing equipment readily available and shall be trained in the use of such equipment. Individuals assigned to fire watch duty shall be responsible for extinguishing spot fires and communicating an alarm.		
3504.2.4 Fire training. The individuals responsible for performing the hot work and individuals responsible for providing the fire watch shall be trained in the use of portable fire extinguishers.		
3504.2.5 Fire hoses. Where hose lines are required, they shall be connected, charged and ready for operation.		
3504.2.6 Fire extinguisher. Not less than one portable fire extinguisher complying with Section 906 and with a minimum 2-A:20-B:C rating shall be readily accessible within 30 feet of the location where hot work is performed.		
PRE-HOT WORK CHECKS		
3504.3 Area reviews. Before hot work is permitted and not less than once per day while the permit is in effect, the area shall be inspected by the individual responsible for authorizing hot work operations to ensure that it is a fire safe area. Information shown on the permit shall be verified prior to signing the permit in accordance with Section 105.6.		
3504.3.1 Pre-hot-work check. A pre-hot-work check shall be conducted prior to work to ensure that all equipment is safe and hazards are recognized and protected. A report of the check shall be kept at the work site during the work and available upon request. The pre-hot-work check shall determine all of the following:		
1. Hot work equipment to be used shall be in satisfactory operating condition and in good repair.		
2. Hot work site is clear of combustibles or combustibles are protected.		
3. Exposed construction is of noncombustible materials or, if combustible, then protected.		
4. Openings are protected.		
5. Floors are kept clean.		
6. No exposed combustibles are located on the opposite side of partitions, walls, ceilings or floors.		
7. Fire watches, where required, are assigned.		
8. Approved actions have been taken to prevent accidental activation of suppression and detection equipment in accordance with Sections 3504.1.8 and 3504.1.9.		
9. Fire extinguishers and fire hoses (where provided) are operable and available.		



